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P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 06/18/2008

\$1740

## NOTICE OF ALLOWANCE AND FEE(S) DUE

23599 7590 06/18/2008

MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201

NO

PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

EXAMINER LESTER EVELVN A PAPER NUMBER ARTHNIT 2873

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,104	05/16/2005	Michael Heckmeier	MERCK-3016	3575

APPLN, TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV, PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE

TITLE OF INVENTION: ELECTR-OOPTICAL LIGHT MODULATING ELEMENT, ELECTRO-OPTICAL DISPLAY AND MODULATING MEDIUM

\$1440

nonprovisional \$300 09/18/2008 THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth tions	ng the Patent, advance on nerwise in Block 1, by (	rders and notification of a) specifying a new corre	maintenance fees v spondence address	vill be ; and/o	mailed to the current r (b) indicating a sepa	correspond trate "FEE	lence address as ADDRESS" for
	ENCE ADDRESS (Note: Use Bi	ock 1 for any change of address)	Fee par	e(s) Transmittal. The ers. Each addition:	is certi d paper	g can only be used for ficate cannot be used for r, such as an assignmental filing or transmission.	or any other	r accompanying
23599	7590 06/18			Ces	tificat	e of Mailing or Trans	mission	
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ARLINGTON,	VA 22201							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ξ	ATTC	RNEY DOCKET NO.	CONFIRM	MATION NO.
10/535,104	05/16/2005		Michael Heckmeier			MERCK-3016		3575
TITLE OF INVENTION	: ELECTR-OOPTICAL	LIGHT MODULATING	GELEMENT, ELECTRO-	OPTICAL DISPL	AY AN	TD MODULATING M	EDIUM	
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	D.	ATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$0 \$1740		09	9/18/2008
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LESTER, E	EVELYN A	2873	359-322000	_				
	ondence address (or Cha B/122) attached. ication (or "Fee Address 32 or more recent) attach	nge of Correspondence	2. For printing on the (1) the names of up to or agents OR, alternat (2) the name of a sing registered attorney or 2 registered patent atte listed, no name will be	o 3 registered pater ively, de firm (having as agent) and the nam orneys or agents. If	nt attor	per a 2		
PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSI	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee pletion of this form is NO	THE PATENT (print or ty data will appear on the part a substitute for filing an (B) RESIDENCE: (CIT trinted on the patent):	oatent. If an assign assignment. Y and STATE OR 0	COUNT	IRY)		
4a. The following fee(s)  Issue Fee Publication Fee (N	vo small entity discount p		b. Payment of Fee(s): (Ple  A check is enclosed.  Payment by credit ca  The Director is hereb overpayment, to Dep	rd. Form PTO-203i	is att	ached. required fee(s), any de	ficiency, or	
	s SMALL ENTITY state	is. See 37 CFR 1.27.	b. Applicant is no los					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	ed from anyone other than k Office.	the applicant; a reg	istered	attorney or agent; or the	ne assignee	or other party in
Authorized Signature				Date				
Typed or printed name				Registration !				
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## UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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10/535,104	05/16/2005	Michael Heckmeier	MERCK-3016	3575		
23599 7590 06/18/2008 MILLEN, WHITE, ZELANO & BRANIGAN, P.C.			EXAMINER			
			LESTER, EVELYN A			
2200 CLARENDON BLVD. Suite 1400 Arlington, Va 22201		ART UNIT	PAPER NUMBER			
			2873 DATE MAII ED: 06/18/200	8		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Notice of Allowability

Application No.	Applicant(s)
10/535,104	HECKMEIER ET AL.
Examiner	Art Unit
Evelvn A. Lester	2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 3-24-08.
- 2. The allowed claim(s) is/are 1-3,7-10,13-18,21,23 and 27-32.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☑ All b) ☐ Some\* c) ☐ None of the:
    - 1. A Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
      - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) I hereto or 2) to Paper No./Mail Date \_\_\_\_\_
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. 
  Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. 

  Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other \_\_\_\_.

/Evelyn A. Lester/ Primary Examiner, Art Unit 2873 10/535,104 Art Unit: 2873

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 3-24-08 has been entered.

## REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

The prior art does not show or fairly suggest the claimed invention of an electrooptical modulation element(s) and a mesogenic modulation medium having the claimed
structure and claimed limitations, wherein a rejection under 35 USC 102 or 103 would
be improper. Please particularly note the combination of claimed elements and claimed
limitations, including the reasons for indicating allowable subject matter given in the
office action mailed on 6-29-07, on page 11, paragraph 16. It is noted that independent
claim 23 has been amended to incorporate the indicated allowable subject matter of
claim 6 (now cancelled). Also, it should be noted that claim 28 is dependent on claim 32
as a result of an amendment filed on 4-16-07, wherein new claims 30-32 were added.

10/535,104 Art Unit: 2873

Therefore, in light of the Applicants' arguments and/or amendments, the claimed invention is considered to be in condition for allowance as being novel and nonobvious over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Drawings

3. No drawings have been filed with this application.

## Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

## Priority

 Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. Art Unit: 2873

#### Conclusion

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Evelyn A. Lester whose telephone number is (571) 2722332. The examiner can normally be reached on M-F, subject to an increased flex
schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L. Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Evelyn A. Lester/ Primary Examiner, Art Unit 2873